

WHAT IS CLAIMED IS:

1. A Raman amplification method utilizing Raman scattering within an optical fiber, comprising:

inputting a first pump light adapted to Raman-amplify an optical signal to an amplifier fiber from an optical signal output end of said amplifier fiber; and

inputting a second pump light having a wavelength shorter than that of the first pump light and adapted to Raman-amplify the first pump light to said amplifier fiber from an optical signal input end of said amplifier fiber.